

BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE**Executive Engineer, Byatarayanapura Division, B.B.M.P., Bangalore - 92****BILL OF QUANTITIES (BOQ) for Package No. 04 (Package consists of 28 works) (Estimated cost Rs. 970.00 lakhs)**

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
1	9906.32	Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	166.42	Rupees One Hundred Sixty Six and Forty Two Paise Only
2	251.25	Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .(Road)	Cum	5159.02	Rupees Five Thousand One Hundred Fifty Nine and Two Paise Only
3	5.17	Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .(Playground)	Cum	5256.36	Rupees Five Thousand Two Hundred Fifty Six and Thirty Six Paise Only
4	2920.32	Removing B.S.slab of Drain and stacking as per the directions of the Engineer-in-charge of the work .	Sqm	65.72	Rupees Sixty Five and Seventy Two Paise Only
5	2724.18	Removing and refixing stone slabs of drains and pointing in CM (1:3) as per the directions of the Engineer-in-charge of the work .	Sqm	80.56	Rupees Eighty and Fifty Six Paise Only
6	553.03	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete as per the directions of the Engineer-in-charge of the work .	Sqm	665.68	Rupees Six Hundred Sixty Five and Sixty Eight Paise Only
7	2691.77	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete as per the directions of the Engineer-in-charge of the work .(Road)	Sqm	825.74	Rupees Eight Hundred Twenty Five and Seventy Four Paise Only
8	3374.36	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	86.92	Rupees Eighty Six and Ninety Two Paise Only
9	681.41	Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications and as per the directions of the Engineer-in-charge of the work	Cum	48.76	Rupees Forty Eight and Seventy Six Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
10	15622.2	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms as per the directions of the Engineer-in-charge of the work .	Cum	122.96	Rupees One Hundred Twenty Two and Ninety Six Paise Only
11	1507.2	Construction of embankment with approved material Gravel/Murum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murum, watering charges & compaction by vibratory roller to 95% of proctors density) as per the directions of the Engineer-in-charge of the work	Cum	320.12	Rupees Three Hundred Twenty and Twelve Paise Only
12	6102.34	Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM of machinery complete as per specifications and as per the directions of the Engineer-in-charge of the work(road)	Sqm	5.3	Rupees Five and Thirty Paise Only
13	3120.2	Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM of machinery complete as per specifications and as per the directions of the Engineer-in-charge of the work (PLAYGROUND)	Sqm	5.4	Rupees Five and Forty Paise Only
14	4822.7	Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	1768.08	Rupees One Thousand Seven Hundred Sixty Eight and Eight Paise Only
15	7508.2	Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	30.74	Rupees Thirty and Seventy Four Paise Only
16	32529.78	Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	13.78	Rupees Thirteen and Seventy Eight Paise Only
17	32529.78	Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsgm using mechanical means complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	27.56	Rupees Twenty Seven and Fifty Six Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
18	1725.14	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.4 % VG-30 Bitumen as per the directions of the Engineer-in-charge of the work .	Cum	5730.36	Rupees Five Thousand Seven Hundred Thirty and Thirty Six Paise Only
19	109978.4	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	3.18	Rupees Three and Eighteen Paise Only
20	109978.4	Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	12.72	Rupees Twelve and Seventy Two Paise Only
21	4827.1	Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	8118.54	Rupees Eight Thousand One Hundred Eighteen and Fifty Four Paise Only
22	4065.89	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	542.72	Rupees Five Hundred Forty Two and Seventy Two Paise Only
23	1660.11	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specification and as per the directions of the Engineer-in-charge of the work .	Cum	827.86	Rupees Eight Hundred Twenty Seven and Eighty Six Paise Only

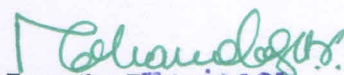
Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
24	1660.38	Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	3986.66	Rupees Three Thousand Nine Hundred Eighty Six and Sixty Six Paise Only
25	1902.31	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	6217.96	Rupees Six Thousand Two Hundred Seventeen and Ninety Six Paise Only
26	467.67	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Concrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	685.82	Rupees Six Hundred Eighty Five and Eighty Two Paise Only
27	3120.2	Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of thorny jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Sqm	9.72	Rupees Nine and Seventy Two Paise Only
28	624.04	Construction of embankment with approved material Gravel/Murum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(which includes cost of gravel / murum, watering charges & compaction by vibratory roller) as per the directions of the Engineer-in-charge of the work .	Cum	326.16	Rupees Three Hundred Twenty Six and Sixteen Paise Only
29	39.14	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary Soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications.	Cum	204.12	Rupees Two Hundred Four and Twelve Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
30	33.97	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.64cum and fine aggregates @ 0.43cum, with superplasticiser @3lts conforming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum	5985.36	Rupees Five Thousand Nine Hundred Eighty Five and Thirty Six Paise Only
31	3880.8	Fabrication supplying and erecting M.S. tubular trusses of all spans with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall conform to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick base plate and shoe plate. The work includes cutting, straightening, placing in position of M.S. pipes and welding wherever necessary and applying one coat of redoxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, letc., complete as per specification	kg	118.8	Rupees One Hundred Eighteen and Eighty Paise Only
32	12.4	Mild Steel pipe 100mm dia 2.5 thick	m	286.2	Rupees Two Hundred Eighty Six and Twenty Paise Only
33	147.42	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces complete as per specifications	Sqm	71.28	Rupees Seventy One and Twenty Eight Paise Only
34	69.96	Applying red lead ready mix priming coat over new steel or other metal surface including preparing the surface after thoroughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications	Sqm	31.32	Rupees Thirty One and Thirty Two Paise Only
35	1035.68	Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.	Sqm	88.56	Rupees Eighty Eight and Fifty Six Paise Only
36	39.14	Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge.	Cum	125.28	Rupees One Hundred Twenty Five and Twenty Eight Paise Only
37	4	Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7. Erection of heavy duty pole on Footpath / median 9Mt (5Mt Hb, 165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht, 114.3mm dia 3.65mm thick) as per IS 410 SP 32	Nos	15000	Rupees Fifteen Thousand Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
38	50	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. 2 core 10 sqmm From pole to meter	m	87.6	Rupees Eighty Seven and Sixty Paise Only
39	100	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. 4 core 10 sqmm for FLOOD lighting	m	118.8	Rupees One Hundred Eighteen and Eighty Paise Only
40	150	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct. 6 sqmm to 16 sqmm	m	10.8	Rupees Ten and Eighty Paise Only
41	100	Digging of trench of 0.6m deep * 0.50mtr wide refilling the trench to the required ground level & consolidating etc., complete. (As per Civil SR KSRB I-2, P.7) (750MTRS Street lighting and 50mtrs for training room to near electrical pole) In soil (hard)	m	106	Rupees One Hundred Six Only
42	100	Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150mm all-round the cable.	m	103	Rupees One Hundred Three Only
43	4	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets. 200mm*200mm**98mm.	Nos	2178	Rupees Two Thousand One Hundred Seventy Eight Only
44	8	LED Flood Light. Supplying of LED Floodlight with W System Power consumption pressure die cast aluminum housing with powder coating with IP 65 protection. 1, 200-275V voltage with electronic Driver, PF>0.9, should meet ANSI 2G Vibration test, Compliance to UL/CE with Class I. System rating shall be 50K hrs. @ Lumen maintenance of 70%, system efficacy > 80lm/w. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working	Nos	23577	Rupees Twenty Three Thousand Five Hundred Seventy Seven Only
45	8	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	176	Rupees One Hundred Seventy Six Only
46	2	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 4sqmm	Nos	6.25	Rupees Six and Twenty Five Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
47	4	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 6sqmm	Nos	6.25	Rupees Six and Twenty Five Paise Only
48	4	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 16sqmm	Nos	7.65	Rupees Seven and Sixty Five Paise Only
49	8	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 16sqmm	Nos	11.31	Rupees Eleven and Thirty One Paise Only
50	80	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. 2.5 sqmm for internal FLOOD lighting wiring	m	29.2	Rupees Twenty Nine and Twenty Paise Only
51	50	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. 4 sqmm for main feeder upto DB	m	42.1	Rupees Forty Two and Ten Paise Only
52	200	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. 6 sqmm for main feeder upto DB+100mtrs for earthing	m	63.8	Rupees Sixty Three and Eighty Paise Only
53	6	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32 Amps SP. Group'A'	Nos	418	Rupees Four Hundred Eighteen Only
54	2	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32 Amps DP. Group'A'	Nos	849	Rupees Eight Hundred Forty Nine Only
55	2	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.II - Double Door 12WaySP&N. Group'A'	Nos	1622	Rupees One Thousand Six Hundred Twenty Two Only
56	2	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board. 16-25 Amps 2 pole	Nos	2412	Rupees Two Thousand Four Hundred Twelve Only
57	2	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. 10"x8"x1.5"	Nos	92	Rupees Ninety Two Only
58	2	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 16Amps	Nos	120	Rupees One Hundred Twenty Only
59	2	Supplying, fixing and wiring electronic 5 to 20Amps single phase Class-1 Accuracy with Temper Proof Energy Meter.	Nos	1188	Rupees One Thousand One Hundred Eighty Eight Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
60	8	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40x40x6mm	m	263	Rupees Two Hundred Sixty Three Only
61	15000	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. 40x40x6mm	Sqcm	0.37	and Thirty Seven Paise Only
62	2	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia	Nos	2727	Rupees Two Thousand Seven Hundred Twenty Seven Only
63	10	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	m	77	Rupees Seventy Seven Only


 Executive Engineer
 Byatarayanapura Division
 BBMP, Bangalore-02


 Chief Engineer
 Yelahanka Zone